

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A newborn NOD/SCID/IL2rg-null mouse, into which human-derived hematopoietic stem or precursor cells have been transplanted, and which is able to generate immunocompetent cells derived from said human-derived hematopoietic stem or precursor cells and/or physiologically active substances derived from said immunocompetent cells, wherein the immunocompetent cells comprise B cells, T cells and dendritic cells, wherein after the mouse has matured for three months:

(a) bone marrow tissue extracted from the matured mouse has a ratio of human-derived hematopoietic cells to recipient-derived hematopoietic cells of between 58.8:100 and 90:100,

(b) spleen tissue extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 47.1:100 and 80:100; or

(c) peripheral blood extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 50.1:100 and 80:100.

2. **(Currently Amended)** An immunodeficient mouse obtained as a result of the breeding of a newborn NOD/SCID/IL2rg-null mouse, into which human-derived hematopoietic stem or precursor cells have been transplanted, and which is able to generate immunocompetent cells derived from said human-derived hematopoietic stem or precursor cells and/or physiologically active substances derived from said immunocompetent cells, or a progeny thereof, wherein the immunocompetent cells comprise B cells, T cells and dendritic cells, wherein after the newborn mouse has matured for three months:

(a) bone marrow tissue extracted from the matured mouse has a ratio of human-derived hematopoietic cells to recipient-derived hematopoietic cells of between 58.8:100 and 90:100,

(b) spleen tissue extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 47.1:100 and 80:100; or

(c) peripheral blood extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 50.1:100 and 80:100.

3. (Cancelled)

4. (Previously Presented) The newborn mouse according to claim 1, wherein the hematopoietic stem or precursor cells are derived from bone marrow, cord blood, or peripheral blood.

5. **(Withdrawn-Currently Amended)** The newborn mouse ~~mammal~~ according to claim 1, wherein the immunocompetent cells further comprise NK cells and NKT cells.

6. (Previously Presented) The newborn mouse according to claim 1, wherein the physiologically active substance is a cytokine and/or an immunoglobulin, wherein the immunoglobulin comprises IgG, IgM, IgA and IgD.

7. **(Withdrawn-Currently Amended)** The newborn mouse ~~mammal~~ according to claim 6, wherein the immunoglobulin further comprises IgE.

8. (Cancelled)

9-19. (Cancelled)

20. **(Withdrawn-Currently Amended)** A disease-model mouse ~~mammal~~, which is produced by administering to the mouse ~~mammal~~ according to claim 1, or the mouse ~~mammal~~ or a progeny thereof, any one selected from the group consisting of bacteria, viruses, tumor cells, and tumor antigen peptides, or a progeny thereof.

21. **(Withdrawn-Currently Amended)** The mouse ~~mammal~~ according to claim 20 or a progeny thereof, wherein the disease is an infectious disease.

22. **(Withdrawn-Currently Amended)** A method for screening for an immune-related pharmaceutical, which is characterized in that it comprises administering a test substance to the

mouse ~~mammal~~ according to claim 1, or the mouse ~~mammal~~ or a progeny thereof, and evaluating the effectiveness of the test substance.

23. **(Withdrawn-Currently Amended)** The method according to claim 22, wherein the immune-related pharmaceutical is a vaccine.

24. **(Withdrawn-Currently Amended)** A method for producing immunocompetent cells, which is characterized in that it comprises recovering said immunocompetent cells from the mouse ~~mammal~~ according to claim 1, or the mouse ~~mammal~~ or a progeny thereof.

25. – 26. (Cancelled)

27. **(Withdrawn-Currently Amended)** A method for producing immunocompetent cells, which is characterized in that it comprises recovering said immunocompetent cells from the mouse ~~mammal~~ according to claim 20 or a progeny thereof.

28. – 33. (Cancelled)

34. (Previously Presented) The immunodeficient mouse according to claim 2, wherein the hematopoietic stem or precursor cells are derived from bone marrow, cord blood, or peripheral blood.

35. **(Withdrawn-Currently Amended)** The immunodeficient mouse ~~mammal~~ according to claim 2, wherein the immunocompetent cells further comprise NK cells and NKT cells.

36. (Previously Presented) The immunodeficient mouse according to claim 2, wherein the physiologically active substance is a cytokine and/or an immunoglobulin, wherein the immunoglobulin comprises IgG, IgM, IgA and IgD.

37. **(Withdrawn-Currently Amended)** The immunodeficient mouse ~~mammal~~ according to claim 36, wherein the immunoglobulin further comprises IgE.

38. (Cancelled)

39. (Previously Presented) The newborn mouse according to claim 1, wherein the physiologically active substances are antigen-specific human IgG, IgM, and IgA when the mouse is sensitized to an antigen.

40. (Previously Presented) The immunodeficient mouse according to claim 2, wherein the physiologically active substances are antigen-specific human IgG, IgM, and IgA when the mouse is sensitized to an antigen.

41. (Previously Presented) The newborn mouse according to claim 39, wherein the amount of the antigen-specific human IgG in the serum of the mouse is 0.1 to 1.0×10^4 $\mu\text{g/ml}$ serum.

42. (Previously Presented) The newborn mouse according to claim 39, wherein the amount of the antigen-specific human IgG in the serum of the mouse is 0.1 to 3.4×10^3 $\mu\text{g/ml}$ serum.

43. (Previously Presented) The immunodeficient mouse according to claim 40, the amount of the antigen-specific human IgG in the serum of the mouse is 0.1 to 1.0×10^4 $\mu\text{g/ml}$ serum.

44. (Previously Presented) The immunodeficient mouse according to claim 40, wherein the amount of the antigen-specific human IgG in the serum of the mouse is 0.1 to 3.4×10^3 $\mu\text{g/ml}$ serum.

45. (Cancelled)

46. (Previously Presented) The newborn mouse according to claim 1, wherein bone marrow tissue extracted from the mouse after it has matured for three months has a ratio of

human-derived hematopoietic cells to recipient-derived hematopoietic cells of between 58.8:100 and 90:100.

47. (Previously Presented) The newborn mouse according to claim 1, wherein spleen tissue extracted from the mouse after it has matured for three months has a ratio of human-derived antibody- generating cells to recipient-derived antibody-generating cells of between 47.1:100 and 80:100.

48. (Previously Presented) The newborn mouse according to claim 1, wherein peripheral blood extracted from the mouse after it has matured for three months has a ratio of human-derived antibody- generating cells to recipient-derived antibody-generating cells of between 50.1:100 and 80:100.

49. (New) The newborn mouse according to claim 1, wherein after the mouse has matured for three months:

(a) bone marrow tissue extracted from the matured mouse has a ratio of human-derived hematopoietic cells to recipient-derived hematopoietic cells of between 58.8:100 and 90:100,

(b) spleen tissue extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 47.1:100 and 80:100; and

(c) peripheral blood extracted from the matured mouse has a ratio of human-derived antibody-generating cells to recipient-derived antibody-generating cells of between 50.1:100 and 80:100.